

# MESABI RANGE COMMUNITY & TECHNICAL COLLEGE – VIRGINIA/EVELETH

## Course Outline

Course Title: MSHA New Miner  
Semester Course Prefix and Number: ITSF 1486  
Old Quarter Course Prefix and Number: ITSF 1486

Submitted By:  
Approval Date:  
Revision Date:

Number of Credits: 1      Number of Lecture Credits: 1  
Semester(s) Offered:      Number of Lab Credits: 0      Number of Lab Hours: 0  
Class Size:      Number of Studio/Demonstration/Internship Credits:  
Negotiated by AASC on  
(Date)\_\_\_

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### Course Purpose Code:

- 0 – Developmental Courses
- 1 – Non-transferable, General Education
- 2 – Technical course related to career programs
- 3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
- 4 – Other college course not considered a part of general education (MNTC) e.g. computer science, health, physical education
- 5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements.
- 9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

### Catalog Description:

This course is a requirement for all newly hired mining employees. The content of this course is designed to familiarize the participants with the safety and health aspects of surface mining occupations.

### Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s):  
Reading Prerequisite:  
Composition Prerequisite:  
Mathematics Prerequisite:

### Career Programs and Transfer Majors Accessing this Course:

Millwrights  
Welders  
Industrial Technologies AAS

**Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:** Notes: No more than two goals may be met by any one course. (Curriculum Committee review and the Chief Academic Officer's approval are required).

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|--|--|
| 0. <input checked="" type="checkbox"/> None                                | 6. <input type="checkbox"/> The Humanities and Fine Arts     |
| 1. <input type="checkbox"/> Communications                                 | 7. <input type="checkbox"/> Human Diversity                  |
| 2. <input type="checkbox"/> Critical Thinking                              | 8. <input type="checkbox"/> Global Perspectives              |
| 3. <input type="checkbox"/> Natural Sciences                               | 9. <input type="checkbox"/> Ethical and Civic Responsibility |
| 4. <input type="checkbox"/> Mathematical/Logical Reasoning                 | 10. <input type="checkbox"/> People and the Environment      |
| 5. <input type="checkbox"/> History and the Social and Behavioral Sciences |  |

### Learning outcomes, including any relevant competencies listed in the Minnesota Transfer Curriculum:

Upon completion of this course, students will gain an awareness of the following subjects as they pertain to mining.

1. Hazard Recognition
2. PPE
3. Transportation Controls and Communication Systems
4. Emergency Preparedness
5. Fire Protection and Prevention
6. Ground Controls, Highwall and Water Hazards, Pit and Spoilbank Areas
7. Health
8. First Aid
9. Electrical
10. Explosives and Blasting

**Student assessment methods:**

Mandatory Attendance

Tests

Quizzes

**Use of instructional technology** (includes software, interactive video and other instructional technologies):

Power Point

Videos

**Outline of the major course content:**

Section 1:

1. Introduction
2. Registration
3. Role of New Miner
4. Certification Requirements
5. Hazard Training
6. Video "Customer Delivery"
7. Emergency Evacuation Plans
8. Bloodborne Pathogens considerations
9. Fatalgrams

Section 2:

1. Ground Controls
2. Working in Areas of Highwall and Water Hazards
3. Pit and Spoilbank Areas
4. Illumination and Night Work

Section 3:

1. Transportation Controls – Driver/Vehicle Safety
2. Communication Systems
  - Two way radio procedures
  - Paging systems
  - Warning and Directional Signage
  - Traffic Controls

Section 4:

1. Health
  - Dust, noise, and other health precautions
  - PPE
  - Routine measurements and on-call measurements
  - MSDS Sheets
  - Warning Labels
  - Health provisions of "The Act"

2. Respiratory Devices

Section 5:

1. Fire Warning Signals
2. Fire Extinguisher Training
  - Fire Safety and Prevention
  - Fire Extinguisher Training
  - Live Fire Pit Demonstration

Section 6:

1. First Aid
  - Scene Safety
  - Activating EMS
  - Initial Assessment
  - Focused Assessment
  - Detailed Physical Examination

Section 7:

1. Medical and Trauma Emergencies
  - Cause
  - Signs and Symptoms
  - Medical Care
2. Written Exam
3. Practical Scenarios

Section 8:

1. Electrical Hazards
2. Lock Out / Tag Out
3. Explosive Hazards
4. Final Exam

**Additional special information** (special fees, directives on hazardous materials, etc.)

This is 16 hours of the MSHA New Miner requirement. An additional 8 hours must be done on site within 6 months after completion of this course. MSHA New Miner certificate will be issued upon successful completion of this course.

**Transfer Information:** (Please list colleges/majors that accept this course in transfer.)

**Approvals:**

Body	Representative Signatures	Date
Curriculum Committee		
Faculty Association		
Academic Affairs Standards Committee		
Chief Academic Officer		

Distribution: Original – Administrative Office

Copies: Curriculum Committee Chair, Learning Center, Library, Originating Faculty Member, Records, Student Services, Scheduler, Transfer Specialist

Revised February 10, 2004